

Week of Operation	Sampling Location	Drainfield Discharge (all chemicals on Chemical Spreadsheet)																		
		DD-1																		
		Date	Total Flow	pH	TSS	BOD	Turbidity	Fecal Coliforms	Total Coliforms	Enterococcus	Oil & Grease	TDS	Chloride	Boron	Sulfate	Total Nitrogen	Total Phosphorus	MBAS	Total Nitrogen	TN as % TMDL
		Collection Date	-0.1	5	5	0.1	<2	<2	1	5	5	1	0.1	1		0.01	<0.05		5 lbs/day	
Method	Units	apd	mg/l	mg/l	NTU	MPN/100ml	MPN/100ml	MPN/100ml	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	lbs/day		
53	7/24/08	12,980	6.8	6	<5	1.4	<2	<2	1.0	<5	652	167	0.44	81.9	9.46	7.75	<0.05	1.02	17.07%	
55	8/7/08	10,343	6.8	<5	<5	2.3	<2	<2	<1	<5	604	193		76	7.20			0.62	10.35%	
56	8/14/08	8,381	6.8	<5		0.7	<2	<2	<1	<5	560	163		127	5.25			0.37	6.12%	
58	8/22/08	12,036	6.9	<5	8	2.2	140	1600	<1	<5	620	149	0.27	110	5.03	9.8	<0.05	0.50	8.42%	
59	8/29/08	12,407														7.41		0.77	12.78%	
60	9/11/08	10,142														7.15		0.60	10.08%	
62	9/19/08	13,332	6.9	<5	5	4.5	<2	<2	1.0	<5	760	224	0.33	84.8	7.52	11.3	0.11	0.84	13.94%	
63	9/26/08	9,326														4.83		0.38	6.26%	
63	10/2/08	9,740														3.75		0.30	5.09%	
64	10/9/08	10,591														4.28		0.38	6.30%	
67	10/24/08	10,710														3.00		0.27	4.47%	
67	10/30/08	10,710	6.8	<5	<5	1.0	<2	30	<1	<5	776	297		151	1.64	8.9	<0.05	0.15	2.44%	
69	11/7/08	11,528														3.47		0.33	5.56%	
70	11/20/08	10,753	6.9	<5	<5	3.7	<2	<2	<1	<5	772	296	0.34	80.8	3.84	9.76	<0.05	0.34	5.74%	
71	11/26/08	12,100														3.90		0.39	6.56%	
74	12/18/08	8,906	6.8	<5	<5	0.2	<2	<2	1.0	<5	736	308	0.44	80.8	3.54	8.49	<0.05	0.26	4.38%	
80	1/28/09	8,715	6.6	6	<5	0.2	<2	23	<1	7	752	330	0.43	96.5	2.68	9.78	0.06	0.19	3.25%	
82	2/9/09	6,038														2.51		0.13	2.11%	
83	2/19/09	6,179	6.9	<5	<5	0.9	<2	<2	<1	<5	884	360	0.47	93.1	3.70	8.2	0.09	0.19	3.18%	
84	2/26/09	6,864	6.9	5	<5	2.0	<2	<2	<1	<5						2.32		0.13	2.27%	
85	3/5/09	7,541	6.8	<5	<5	0.7	<2	<2	<1	<5						1.98		0.12	2.08%	
86	3/12/09	6,873	7.3	<5	<5	0.4	9	14	1	<5						1.95		0.11	1.86%	
87	3/19/09	6,885	7.0	<5	<5	<0.1	<2	<2	<1	<5	896	290	0.43	115	2.33	7.99	0.08	0.13	2.23%	
88	3/26/09	6,936	7.0	<5	<5	0.7	<2	<2	<1	<5						2.19		0.13	2.11%	
90	4/9/09	5,005	6.9	6	<5	0.3	<2	<2	<1	<5						0.81		0.03	0.56%	
91	4/16/09	5,439	6.8	39	50	35.4	1600	1600	<1	<5						22.45		1.02	16.97%	
93	4/28/09	5,651	6.7	<5	<5	4.3	1600	1600	3	<5						9.81		0.46	7.71%	
93	4/30/09	6,156	6.2	<5	<5	5.1	23	50	<1	<5	1012	365	0.52	146	7.42	10.6	<0.05	0.38	6.35%	
94	5/7/09	8,300	7.0	<5	<5	2.6	<2	8	4	<5						4.07		0.28	4.70%	
95	5/14/09	5,330	7.9	12	<5	1.1	<2	<2	<1	<5						3.39		0.15	2.51%	
96	5/21/09	3,380	7.3	8	<5	3.0	<2	240	2	<5	1030	1240	0.58	384	3.26	19.8	0.06	0.09	1.53%	
97	5/28/09	6,830	7.0	<5	<5	0.4	<2	<2	<1	<5						2.16		0.12	2.05%	
98	6/4/09	7,617	7.0	<5	<5	0.9	<2	<2	<1	11						2.29		0.15	2.42%	
99	6/11/09	7,371	6.9	<5	<5	0.8	<2	<2	<1	<5						2.00		0.12	2.05%	
100	6/18/09	10,102	6.9	<5	<5	0.9	<2	<2	<1	<5	916	325	0.53	101	1.60	9.69	<0.05	0.13	2.25%	
101	6/25/09	7,804	6.7	<5	<5	0.5	<2	<2	<1	<5						1.92		0.12	2.08%	
102	7/2/09	6,048	7.2	<5	<5	0.4	<2	<2	<1	<5						1.55		0.08	1.30%	
103	7/9/09	7,614	7.9	<5	<5	0.2	<2	<2	1	<5						1.60		0.10	1.69%	
104	7/15/09	5,847	7.0	<5	<5	0.6	<2	<2	<1	<5						0.95		0.05	0.77%	
105	7/22/09	5,886	6.6	<5	<5	0.3	<2	<2	<1	<5	744	275	0.54	126	1.23	8.05	0.08	0.06	1.01%	
107	8/6/09	6,642	7.0	6	<5	0.2	<2	<2	<1	<5						1.21		0.07	1.12%	
109	8/20/09	10,292	6.8	<5	<5	0.2	<2	<2	<1	<5	778	230	0.55	85.9	0.67	7.6	<0.05	0.06	0.96%	
110	8/26/09	8,530	7.0	<5	<5	0.5	<2	<2	<1	<5						1.38		0.10	1.64%	

## Malibu Village Plaza Monitoring Program

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### Environmental Engineers/Consultants

LOMBARDO ASSOCIATES, INC.

Malibu Creek Plaza Effluent Water Quality Data											Nitrex™ Treatment System		
	Constituent	BOD	Total Suspended Solids	Turbidity	Oil/Grease	TDS	Sulfate	Chloride	Total Nitrogen	Enterococcus (b)	Total Coliform	Flow @ Sampling Date	Avg. 20 Month Flow
	Units	mg/l	mg/l	NTU	mg/l	mg/l	mg/l	mg/l	mg/l	MPN/100 ml	MPN/100 ml	gpd	gpd
Malibu Creek Plaza Effluent Standards	Average	30.00	30.00	10.00						≤400			
Malibu Creek Plaza Effluent Standards	Max	26.00	15.00	15.00	15.00	2,000	500	500	10.00	104,000			
Title 22 Unrestricted Reuse Requirements	Average		2.00								2		
Title 22 Unrestricted Reuse Requirements	Max		10.00								23		
Sampling Location	Date												
	July 2007 Avg.	164.00	36.00	18.60	9.00	620	6	189	11.47			14,429	21,982
	Aug. 2007 Avg.	70.75	23.00	25.55	<5	940	23	228	4.24			12,755	15,244
	Sept. 2007 Avg. <sup>1</sup>	4.90	3.20	1.76	<5	590	66	241	5.79	<1	<2	10,938	11,778
	Oct. 2007 Avg <sup>2</sup>	6.90	<5	1.08	<5	572	90	90	4.71	<1	<2	13,011	11,950
	Nov. 2007 Avg.	<5	<5	0.85	<5	526	59	212	3.23			12,475	11,692
	Dec. 2007 Avg.	12.00	9.00	1.80	<5	688	62	270	3.57	<1	<8	10,834	11,692
	Jan. 2008 Avg.	6.00	<5	1.10	<5	604	50	162	4.73	<1	50	9,982	9,680
	Feb. 2008 Avg.	<5	<5	5.40	<5	684	68	226	5.61	<1	<2	10,133	9,893
	Mar. 2008 Avg.	<5	<5	1.90	<5	720	98	213	6.72	<1	<2	8,729	9,808
	Apr. 2008 Avg.	<5	7.00	2.60	<5	660	87	205	9.17	<1	23	9,605	10,239
	May 2008 Avg.	<5	<5	1.80	<5	748	81	235	7.88	<1	1,600	8,355	9,475
	June 2008 Avg.	<5	8.00	1.40	<5	776	132	296	7.88	11.00	22	10,474	9,996
	July 2008 Avg.	<5	6.00	1.40	<5	652	82	167	9.46	<1	<2	11,200	11,057
	August 2008 Avg.	5.25	<5	1.73	<5	595	104	168	6.22	<1	533	8,696	10,255
	September 2008 Avg.	5.00	<5	4.50	<5	760	85	224	6.50	1.00	<2	9,575	9,086
	October 2008 Avg.	<5	<5	1.00	<5	776	151	297	3.17	<1	30	10,600	9,193
	November 2008 Avg.	<5	<5	3.70	<5	772	81	296	3.74	<1	<2	10,093	9,734
	December 2008 Avg.	<5	<5	0.20	<5	736	81	308	3.54	1.00	<2	7,551	9,153
	January 2009 Avg.	<5	6.00	0.20	7.00	752	97	330	2.68	<1	23	7,817	8,084
	February 2009 Avg.	<5	<5	1.45	<5	884	93	360	2.84	<1	<2	6,647	6,216
	March 2009 Avg.	<5	<5	0.46	<5	896	115	290	2.11	<1	4	6,627	6,429
	April 2009 Avg.	14.38	12.50	11.28	<5	1,012	146	365	10.12	1.15	813	4,673	5,649
	May 2009 Avg.	<5	6.25	1.78	<5	1,030	384	1,240	3.22	1.75	63	4,461	5,258
	June 2009 Avg.	<5	<5	0.78	4.63	916	101	325	1.95	<1	<2	7,457	7,139
	July 2009 Avg.	<5	<5	0.38	<5	744	126	275	1.33	0.63	<2	6,363	6,372
	August 2009 Avg.	<5	4.25	0.20	<5	778	86	230	0.94	<1	<2	8,046	6,986
	Average from 9/1/07	6.23	10.75	10.2	2.79	764	104	205	4.97	1.08	132	9,305	9,903
	Average from 10/1/08 on	2.58	4.73	1.55	3.10	845	133	352	3.24	0.73	453	7,511	7,535
	Average from 10/1/08 excluding Operator error data	2.50	4.04	0.95	3.10	820	131	355	2.9	0.67	415	7,751	7,586

<sup>1</sup>The Sept TN Average does not include the September 7 sampling data, as the TN for this date was high due to start-up conditions.

<sup>2</sup>The Oct TN Average does not include the October 25 sampling data, as the TN for this date was high due to Operational Issues.

(a) The limits for coliform shall apply, prior to discharge of the effluent into the leach fields.

(b) The enterococcus limit is geometric mean of at least 5 equally spaced samples in any 30-day period.

DD-1 = Drainfield Discharge

DF-1 = Disinfection Feed

## 1 PERMIT REQUIREMENTS

The Wastewater Treatment and Dispersal System installed at Malibu Village Plaza in Malibu, CA became operational in July 2007. Figure 1-1 illustrates the Treatment / Dispersal System process flow diagram. Figure 1-2 illustrates the layout of the Treatment System on the site.

The System has the following monitoring requirements as described in the Los Angeles Regional Water Quality Control Board Order No. 01.010 and CI 8226 Monitoring and Reporting Program, attached in Appendix A.

### 1. Flow Monitoring

The Monitoring and Reporting Program No. CI 8226 is an integral part of California Regional Water Quality Board Order No. 01-010. It requires that monthly average and daily waste flow volumes to the septic systems be measured and that the names of any new dischargers be reported along with the flow and characteristics of their waste stream.

### 2. Treatment Plant Effluent Monitoring

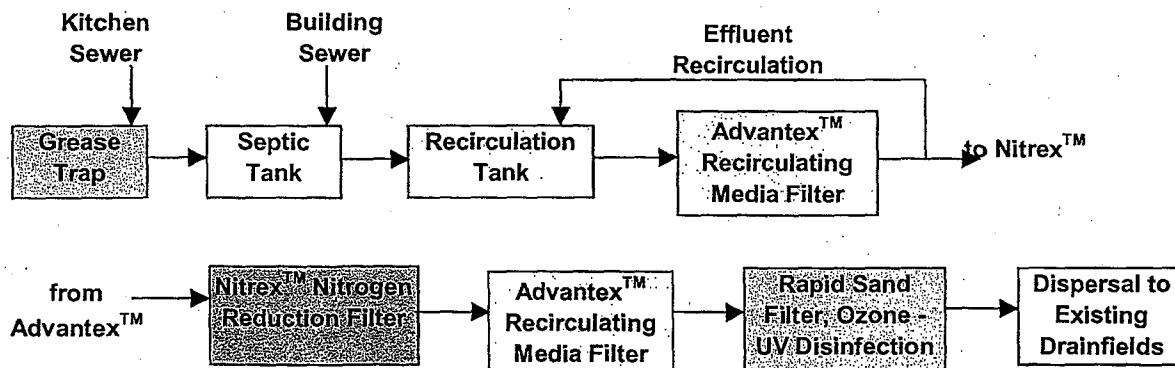
The location of the monitoring is the disinfection system discharge prior to drainfield dosing tank. The monitoring shall be conducted as described in Table 1-1.

### 3. Groundwater monitoring

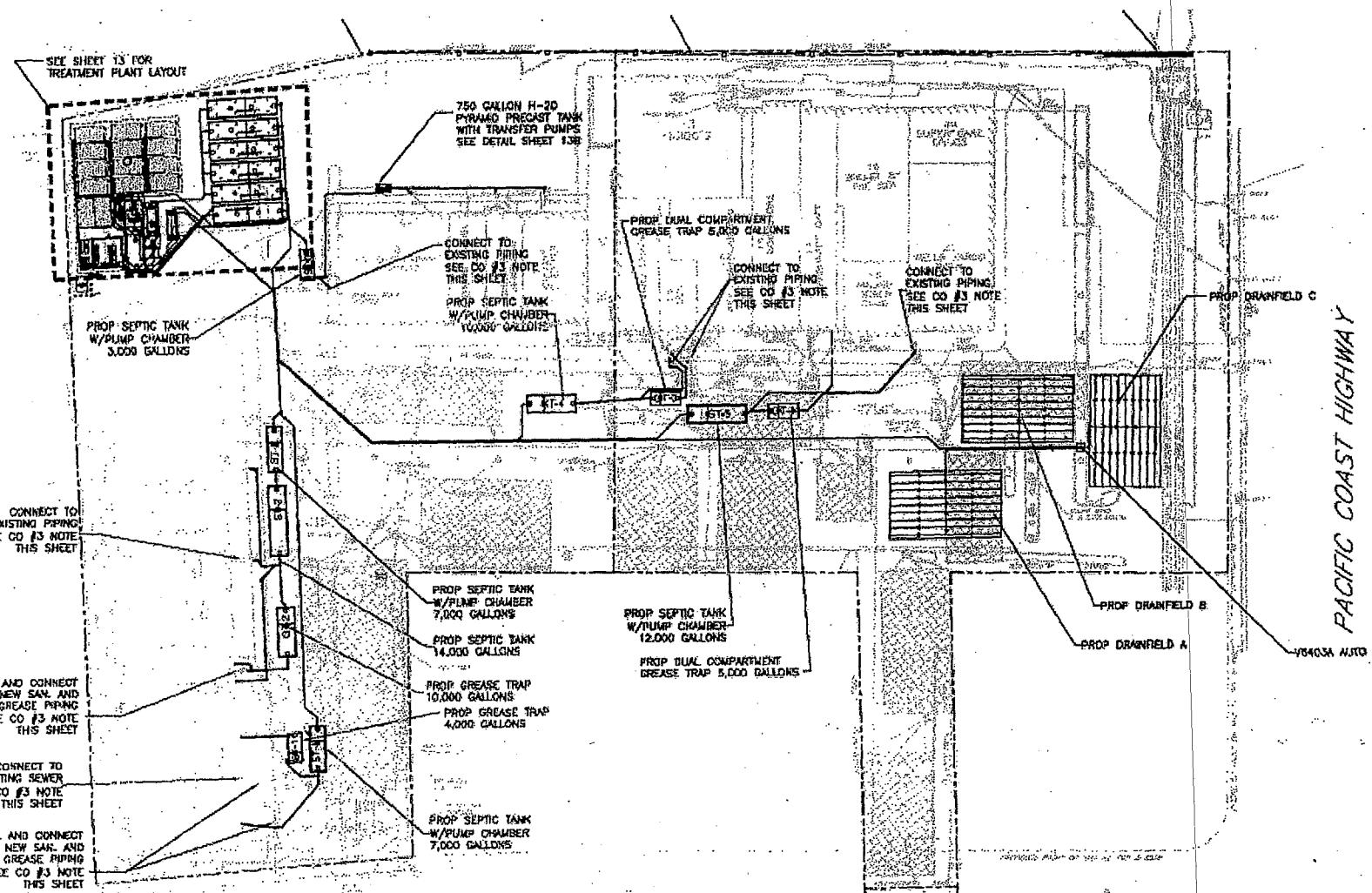
A monitoring program to measure, sample, and analyze the groundwater both upgradient and downgradient from the drain field system has been established to determine if the discharge has impacted or is impacting water quality.

Table 1-2 describes the groundwater monitoring requirements for the Malibu Village Plaza groundwater monitoring wells, illustrated on Figure 1-3.

FIGURE 1-1: MALIBU VILLAGE PLAZA PROCESS FLOW DIAGRAM



**FIGURE 1-2: MALIBU VILLAGE PLAZA TREATMENT SYSTEM LAYOUT**



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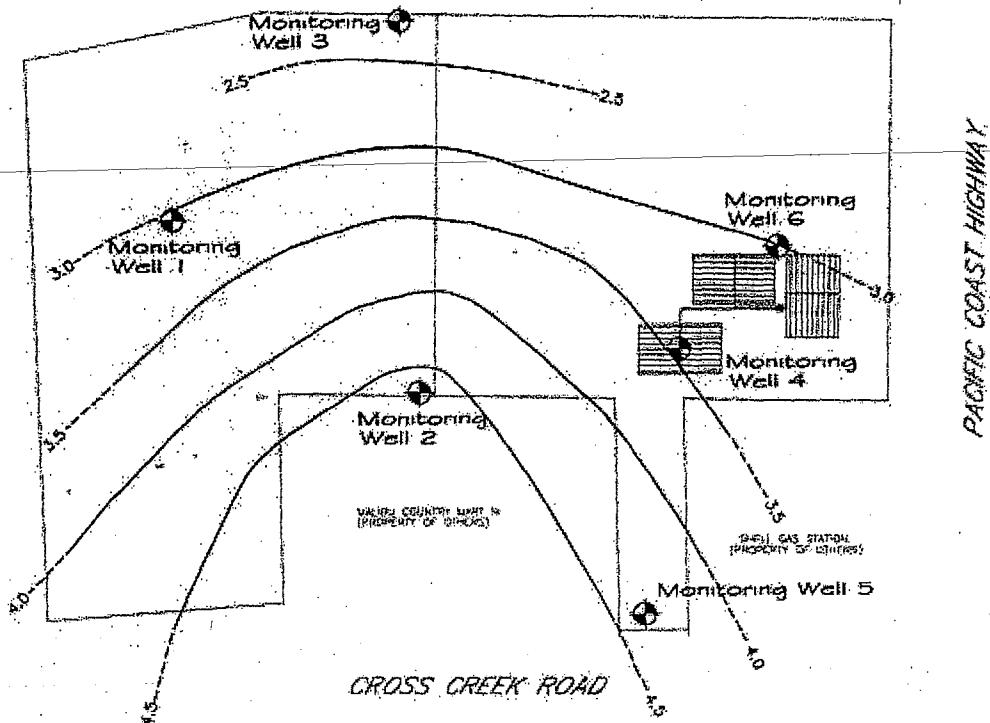
**TABLE 1-1: EFFLUENT MONITORING REQUIREMENTS**

<b>Constituent</b>	<b>Units</b>	<b>Type of Samples</b>	<b>Minimum Frequency of Analysis</b>
Total flow	Gal/day	Recorder	Continual
pH	pH units	Grab	Weekly
Total Suspended solids (TSS)	mg/l	Grab	Weekly
BOD <sub>5</sub> 20°C	mg/l	Grab	Weekly
Turbidity	NTU	Grab	Weekly
Total and fecal coliform	MPN/100ml	Grab	Weekly
Enterococcus	MPN/100ml	Grab	Weekly
Oil and grease	mg/l	Grab	Weekly
Temperature	°F	Grab	Weekly
Total dissolved solids (TDS)	mg/l	Grab	Monthly
Chloride	mg/l	Grab	Monthly
Boron	mg/l	Grab	Monthly
Sulfate	mg/l	Grab	Monthly
Nitrate-N	mg/l	Grab	Monthly
Nitrite-N	mg/l	Grab	Monthly
Ammonia-N	mg/l	Grab	Monthly
TKN	mg/l	Grab	Monthly
Phosphorus	mg/l	Grab	Monthly
MBAS	mg/l	Grab	Monthly
Volatile and semi-volatile organics	ug/l	Grab	Monthly
Priority pollutant scan	ug/l	Grab	Annual

**TABLE 1-2: GROUNDWATER MONITORING PROGRAM**

<b>Constituent</b>	<b>Units</b>	<b>Minimum Frequency of Analysis</b>
pH	pH Units	quarterly
Total and Fecal Coliform	MPN/100 ml	quarterly
Enterococcus	MPN/100 ml	quarterly
BOD <sub>5</sub> 20°C	mg/l	quarterly
Ammonia-N	mg/l	quarterly
Nitrate-N	mg/l	quarterly
Nitrite-N	mg/l	quarterly
Organic Nitrogen	mg/l	quarterly
Phosphorus	mg/l	quarterly
MBAS	mg/l	quarterly
TDS (total dissolved solids)	mg/l	quarterly
Boron	mg/l	quarterly
Chloride	mg/l	quarterly
Sulfate	mg/l	quarterly
Volatile and semi-volatile organics	ug/l	quarterly
Priority pollutant scan	ug/l	annual

**FIGURE 1-3: MALIBU VILLAGE PLAZA GROUNDWATER MONITORING WELLS**



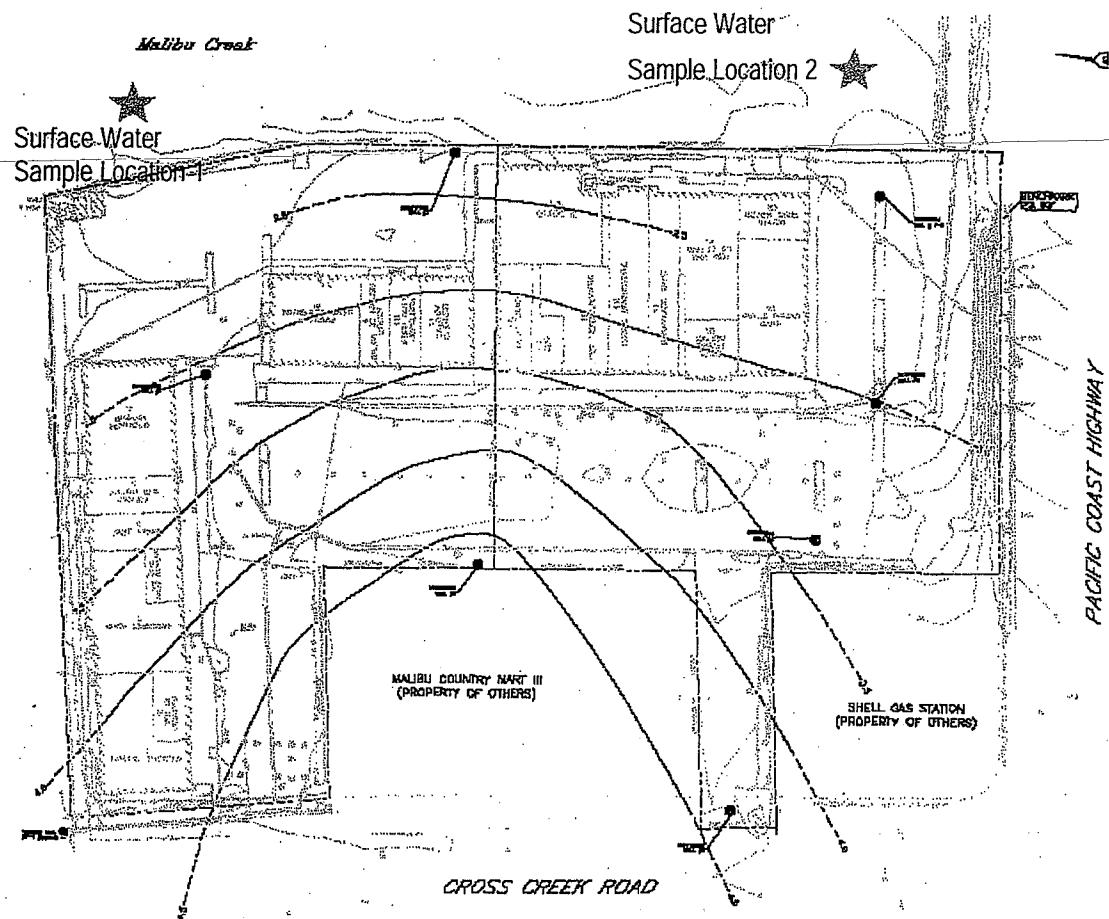
#### **4. Surface Water Monitoring**

Surface water monitoring of Malibu Village is required as part of the Monitoring and Reporting Program. Table 1-3 includes the requirements of the surface water monitoring. Figure 1-4 illustrates the location of the two surface monitoring locations.

**TABLE 1-3: SURFACE WATER MONITORING PROGRAM**

Constituent	Units	Minimum Frequency of Analysis
Total and Fecal Coliform	MPN/100 ml	monthly
Enterococcus	MPN/100 ml	monthly
Total Nitrogen	mg/l	monthly

**FIGURE 1-4: MALIBU VILLAGE PLAZA SURFACE MONITORING LOCATIONS**



### **5. Annual Water Balance – Groundwater Discharge**

An annual water balance has been calculated and is presented in Section 2.

### **6. Inspection**

The system shall be inspected at least once every two years by an inspector retained by the discharger but subject to the approval of the Executive Officer of the California Regional Water Quality Control Board. Lombardo Associates, Inc., the system's Design Engineer, is the inspector. Inspection occurred on August 12, 2009.

### **7. Operators**

The wastewater treatment system is operated by BioSolutions, Inc. (5310 Derry Avenue, Suite E, Agoura Hills, CA 91301) for the entire System, except for the disinfection unit which is operated by Pure-O-Tech (520 South Andreason Dr., Escondido, CA 92029). Lombardo Associates, Inc. provides continual O&M engineering oversight services.

## 2 MONITORING & SAMPLING RESULTS

The Wastewater Treatment System has been operational as of July 2007.

### 2.1 Wastewater Flow

The wastewater flow and water use data is presented in Tables 2-1 through 2-4 and the effluent quality data in Tables 2-5 through 2-7:

TABLE 2-1: MALIBU VILLAGE PLAZA MONTHLY FLOW SUMMARY<sup>1</sup>

Month	Flow (gpd)	
	Average	Max
Jul-07	13,317	16,843
Aug-07	13,560	17,519
Sep-07	11,958	16,338
Oct-07	11,951	16,380
Nov-07	12,138	16,070
Dec-07	9,884	12,794
Jan-08	9,680	11,188
Feb-08	9,893	12,531
Mar-08	9,905	11,950
Apr-08	10,238	13,512
May-08	8,978	14,429
Jun-08	9,996	12,838
Jul-08	11,057	14,682
Aug-08	10,255	13,914
Sep-08	9,086	11,608
Oct-08	9,193	12,837
Nov-08	9,734	16,695
Dec-08	9,153	11,092
Jan-09	8,094	10,560
Feb-09	6,216	8,927
Mar-09	6,429	8,907
Apr-09	5,649	6,853
May-09	5,258	9,976
Jun-09	7,139	9,301
Jul-09	6,372	7,915
Aug-09	6,860	8,067
<i>Average</i>	<i>9,307</i>	<i>12,451</i>

Max Flow Only (gpd)		
Avg.	12,451.	
Max.	17,519	
Min.	6,853	

<sup>1</sup> As measured by wastewater flow meter.

**TABLE 2-2: AVERAGE SEPTIC TANK FLOW**

Month	Average Septic Tank Flow (gpd)					Flow Meter Measure DAVID WATER Generator Total	Variance AS-Avg W-Wflow	
	ST-1	ST-2	ST-3	ST-4	ST-5			
MONTREAL	Malibu Theater	Casa Escobar	Radio Shack	Diesel Bookstore	Pritchett-Rapf &			
	Ben & Jerry's	Bay City Beauty Supply	Guido's	Marmalade Café	Salon at Malibu Creek			
		Fast Frame	European Shoe Repair	Malibu Beach Club	Gregg Ruth Jewelers			
		Malibu Eye Center	Pet Headquarters	Ballet by the Sea	Colony Cleaners			
		Banana Republic		Super Care Drugs				
				Wells Fargo Bank				
JUL-07	794	2,393	3,840	2,918	2,706	12,651	13,317	-5%
Aug-07	896	2,353	3,699	3,727	1,839	12,514	13,560	-8%
Sep-07	1,004	2,055	2,924	3,663	1,880	11,527	11,958	-4%
Oct-07	1,281	2,095	3,924	2,769	2,042	12,110	11,951	1%
Nov-07	1,360	2,180	3,603	3,213	2,221	12,577	12,138	4%
Dec-07	923	2,256	1,901	3,169	1,350	9,599	9,884	-3%
Jan-08	858	2,335	1,710	3,319	811	9,034	9,680	-7%
Feb-08	774	2,368	1,981	3,754	910	9,788	9,893	-1%
Mar-08	836	2,274	1,755	3,753	800	9,420	9,905	-5%
Apr-08	1,186	1,959	2,168	3,687	759	9,759	10,238	-5%
May-08	1,300	1,830	1,129	3,397	711	8,367	8,978	-7%
Jun-08	1,415	2,127	1,559	3,204	613	8,918	9,996	-11%
Jul-08	1,499	2,207	2,278	2,650	1,045	9,679	11,057	-12%
Aug-08	1,883	2,385	2,312	3,509	5,360	15,448	10,255	51%
Sep-08	2,391	1,863	1,688	2,977	697	9,615	9,086	6%
Oct-08	1,814	1,737	3,008	2,848	490	9,897	9,193	8%
Nov-08	2,042	1,824	1,647	2,881	391	8,786	9,734	-10%
Dec-08	1,680	1,679	1,494	2,586	384	7,823	9,153	-15%
Jan-09	1,725	448	1,819	3,199	381	7,571	8,094	-6%
Feb-09	358	229	2,802	3,270	339	6,997	6,216	13%
Mar-09	320	270	12,258	3,067	396	16,310	6,429	154%
Apr-09	317	235	1,655	2,944	398	5,548	5,649	-2%
May-09	508	273	1,440	2,718	396	5,334	5,258	1%
Jun-09	589	396	4,311	3,020	498	8,814	7,139	23%
Jul-09	1,139	326	9,634	3,212	455	14,765	6,372	132%
Aug-09	1,547	325	1,646	2,899	255	6,672	6,860	-3%
Average	1,104	1,155	3,007	3,167	1,081	9,983	9,307	7%

<sup>1</sup>Estimates based upon pump running time meter and pump flow rates from drawdown tests and pump curves.

Following is a list of the tenants that have moved out of the Malibu Village Shopping Center and the respective relocation dates:

- Ben & Jerry's Vacant since July 2007
  - Dance 4 Kids Early September 2008
  - Casa Escobar January 12, 2009
  - Prichett Rapf January 31, 2009
  - Pet Headquarters January 31, 2009
  - FastFrame Mid February 2009
  - Salon @ Malibu Creek February 28, 2009

No new tenants have moved in.

**TABLE 2-3: AVERAGE WATER USE**

Month	Avg. Water Use (gpd)		
	PGC	NEP	Total
Jul-07	4,929	9,784	14,713
Aug-07	4,673	8,733	13,407
Sep-07	4,452	7,686	12,138
Oct-07	4,513	7,695	12,208
Nov-07	4,638	7,801	12,439
Dec-07	4,244	5,779	10,023
Jan-08	4,673	6,025	10,698
Feb-08	5,133	7,085	12,218
Mar-08	3,417	4,739	8,156
Apr-08	4,240	5,680	9,920
May-08	4,389	5,952	10,341
Jun-08	4,389	5,952	10,341
Jul-08	4,389	5,952	10,341
Aug-08	4,224	6,220	10,444
Sep-08	6,589	5,483	12,072
Oct-08	6,589	5,483	12,072
Nov-08	5,191	5,456	10,647
Dec-08	5,191	5,456	10,647
Jan-09	4,585	5,505	10,090
Feb-09	1,689	5,658	7,347
Mar-09	1,438	5,566	7,004
Aug-09	1,818	4,984	6,803
Average	4,336	6,303	10,639

<sup>1</sup>Based upon periodic water meter readings. Constant readings for multiple months indicates water meter reading made in last month.

**TABLE 2-4: TREATMENT PLANT FLOW**

Month	Average Treatment Plant Flow (gpd)			Avg. WW Generation as % of Water Use	Avg. WW Generation as % of App. K Flow (25,614 gpd)	Max. WW Generation as % of App. K Flow (25,614 gpd)
	Avg. Water Use <sup>1</sup>	Avg. Wastewater Generation <sup>2</sup>	Variance			
Jul-07	14,713	13,317	-1,396	-9%	52%	66%
Aug-07	13,407	13,560	153	1%	53%	68%
Sep-07	12,138	11,958	-180	-1%	47%	64%
Oct-07	12,208	11,951	-257	-2%	47%	64%
Nov-07	12,439	12,138	-301	-2%	47%	63%
Dec-07	10,023	9,884	-139	-1%	39%	50%
Jan-08	10,698	9,680	-1,017	-10%	38%	44%
Feb-08	12,218	9,893	-2,325	-19%	39%	49%
Mar-08	8,156	9,905	1,749	21%	39%	47%
Apr-08	9,920	10,238	318	3%	40%	53%
May-08	10,341	8,978	-1,363	-13%	35%	56%
Jun-08	10,341	9,996	-345	-3%	39%	50%
Jul-08	10,341	11,057	716	7%	43%	57%
Aug-08	10,444	10,255	-189	-2%	40%	54%
Sep-08	12,072	9,086	-2,986	-25%	35%	45%
Oct-08	12,072	9,193	-2,879	-24%	36%	50%
Nov-08	10,647	9,734	-913	-9%	38%	65%
Dec-08	10,647	9,153	-1,494	-14%	36%	43%
Jan-09	10,090	8,094	-1,996	-20%	32%	41%
Feb-09	7,347	6,216	-1,131	-15%	24%	35%
Mar-09	7,004	6,429	-575	-8%	25%	35%
Aug-09	6,803	6,860	57	1%	27%	31%
<b>Average</b>	<b>10,596</b>	<b>9,859</b>	<b>-736</b>	<b>-7%</b>	<b>38%</b>	<b>49%</b>

<sup>1</sup>Based upon periodic water meter readings.

<sup>2</sup>Based upon wastewater flow meter.

Max. WW Generation as % of App. K Flow	
Avg.	49%
Max.	68%
Min.	31%

## **2.2 Effluent Quality**

Tables 2-5 and 2-6 present the effluent quality of the Malibu Village Wastewater Treatment System. Table 2.7 presents volatile and semi-volatile organic compound effluent quality. Of 2,480 analyses, only 8 had concentrations above detection limits. 124 volatile and semi-volatile organic compounds are monitored monthly for 20 months. Of the annual priority pollutant scan 33 of 39 tests produced non-detect (ND) results, with the remainder being metals at low ug/l levels.

TABLE 2-5: MALIBU VILLAGE PLAZA WASTEWATER TREATMENT SYSTEM EFFLUENT QUALITY DATA SUMMARY<sup>1</sup>

	Constituent	Average Flow	pH	TSS	BOD <sub>5</sub>	Unbidity	Total Coliform	Fecal Coliform	Enterococcus	Oil & Grease	TDS	Chloride	Boron	Sulfate	TN
		Units	gpd	mg/l	mg/l	NTU	MPN/100 ml	MPN/100 ml	MPN/100 ml	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Malibu Creek Plaza Effluent Standards	Avg			30	30	10.0			245						
	Max			45	45	15.0		200	104	15	2,000	500	2	500	0.2
Title 22 Unrestricted Reuse	Avg					2.0	2.2								
	Max					10.0	23								
Sept. 2007	11,778	6.6	3.2	4.9	1.76	<2	<2	<1	<5	596	241		66	5.79	
Oct. 2007	11,950	6.3	<5	6.9	1.08	<2	1	<1	<5	432	165		90	4.71	
Nov. 2007	11,692	6.9							<5	540	212	0.31	59	3.23	
Dec. 2007	11,692	6.2	9.0	12.0	1.80	8	2	<1	<5	688	270	0.24	62	3.57	
Jan. 2008	9,680	6.4	<5	6.0	1.10	50	<2	<1	<5	604	162	0.21	50	4.73	
Feb. 2009	9,893	6.2	<5	<5	5.40	<2	<2	<1	<5	684	226	0.23	68	5.61	
Mar. 2008	9,808	6.5	<5	<5	1.90	<2	<2	<1	<5	720	213	0.27	98	6.72	
Apr. 2008	10,238	6.4	7.0	<5	2.60	23	23	<1	<5	660	205	0.34	87	9.17	
May 2008	9,475	6.6	<5	<5	1.80	1600 *	350 *	<1	<5	748	235	0.26	81	7.88	
June 2008	9,996	6.7	8.0	<5	1.40	22	11	11	<5	776	296	0.32	132	7.88	
July 2008	11,057	6.8	6.0	<5	1.40	<2	<2	<1	<5	652	167	0.44	82	9.46	
Aug. 2008	10,255	6.9	<5	5.3	1.73	533	140	<1	<5	620	149	0.27	110	6.22	
Sept. 2008	9,086	6.9	<5	5.0	4.50	<2	<2	1	<5	760	224	0.33	85	6.50	
Oct. 2008	9,193	6.8	<5	<5	1.00	30	<2	<1	<5	776	297	0.00	151	3.17	
Nov. 2008	9,734	6.9	<5	<5	3.70	<2	<2	<1	<5	772	296	0.34	81	3.74	
Dec. 2008	9,153	6.8	<5	<5	0.20	<2	<2	1	<5	736	308	0.44	81	3.54	
Jan. 2009	8,094	6.6	6.0	<5	0.20	23	<2	<1	7.00	752	330	0.43	97	2.68	
Feb. 2009	6,216	6.9	<5	<5	1.45	<2	<2	<1	<5	884	360	0.47	93	2.84	
Mar. 2009	6,429	7.0	<5	<5	0.46	4	3	<1	<5	896	290	0.43	115	2.11	
Apr. 2009 **	5,649	6.7	12.5	14.4	11.28	813	806	1	<5	1,012	365	0.52	146	10.12	
May. 2009	5,258	7.0	6.3	<5	1.78	63	<2	2	<5	1,030	1,240	0.58	384	3.22	
June 2009	7,139	7.0	<5	<5	0.78	<2	<2	<1	4.63	916	325	0.53	101	1.95	
July 2009	6,372	7.6	<5	<5	0.38	<2	<2	1	<5	744	275	0.54	126	1.33	
August 2009	6,986	6.9	4.3	<5	0.20	<2	<2	<1	<5	778	230	0.55	86	0.94	
Average from 9/1/07	9,1034	6.7	4.6	7.98	302	132	59	111	288	741	295	0.37	105	4.87	
Average from 10/1/08 after Equipment Repairs	7,293	6.9	4.2	3.6	1.95	85	92	0.7	31	845	392	0.44	133	3.24	
Average from 10/1/08 excluding Operator error data	7,293	6.9	3.6	2.5	0.95	12	12	0.7	31	845	392	0.44	133	2.39	

Notes: (\*) Start-up issue (\*\*\*) Electrical equipment malfunction

**TABLE 2-6A: MALIBU VILLAGE PLAZA WASTEWATER TREATMENT SYSTEM – ALL EFFLUENT DATA**

Week of Operation	Sampling Location	Drainfield Discharge (all chemicals on Chemical Spreadsheet)															MBAS	Total Nitrogen lb/day		
		DD-1																		
		Total Flow	pH	TSS	BOD	Turbidity	Fecal Coliforms	Total Coliforms	Enterococcus	Oil & Grease	TDS	Chloride	Boron	Sulfate	Total Nitrogen	Total Phosphorus				
		gpd	mg/l	mg/l	mg/l	NTU	MPN/100ml	MPN/100ml	MPN/100ml	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l				
7/2/07	Standards (avg)	6.5	30	.30	<10				24											
7/9/07	Standards (max)	8.5	45	.45	<15		200		104	15	2,000	500		500	10					
7/13/07																				
7/16/07																				
4	8/16/07	9,716	6.5	10	70	11.8	900	1600	51	<5	940	228	0.32	23.4	3.4	7	0.27			
6	8/30/07	11,396	6.4	35	19	3.5										3.0	0.29			
7	9/4/07	11,514	6.6	6	11	3.0	110	900	2,419.2							4.1	0.40			
8	9/7/07	10,988	6.6	<5	<5	2.1	300	1600	2,419.2							9.95	0.91			
8	9/11/07	10,579	6.7	<5	<5	1.7	300	1600	2,419.2							4.96	0.44			
9	9/18/07	11,285	6.4	<5	6	1.0	<2	<2	<1	<5	596	241		66.4	5.29	8.79	<0.05	0.50		
10	9/25/07	11,294	6.7	<5	<5	1.0	<2	<2	<1		584					4.60		0.43		
11	10/2/07	14,221	6.4	<5	6	1.5	80	1600	2,419.2		644					3.99		0.47		
12	10/11/07	9,905	6.3	<5	12	1.8	350	1600	817.0		636					4.14		0.34		
13	10/16/07	15,862	6.4	<5	8	0.4	<2	<2	<1		652					3.87		0.51		
14	10/25/07	10,972	6.0	<5	6	1.2	2	2	<1	<5	432	185		89.9	7.80	7.91	<0.05	0.71		
15	10/30/07	16,119	6.4	<5	<5	0.5	<2	<2	<1		496					3.75		0.50		
15	11/1/07	12,183	6.2	<5	<5	1.0	50	1600	65.1		512					3.31		0.34		
17	11/15/07	14,013	7.6	<5	<5	0.7	60	500	1.0	<5	540	212	0.31	59	3.14	6.25	0.08	0.37		
20	12/6/07	9,817	6.2	9	12	1.8	2	8	<1	<5	688	270	0.24	62.1	3.57	8.54	0.08	0.29		
26	1/17/08	10,449	6.4	<5	6	1.1	<2	50	<1	<5	604	162	0.21	49.8	4.73	10.1	0.13	0.41		
33	2/29/08	11,486	6.2	<5	<5	5.4	<2	<2	<1	<5	684	226	0.23	68.4	5.61	22.9	0.13	0.54		
34	3/12/08	9,616	6.5	<5	<5	1.9	<2	<2	<1	<5	720	213	0.27	97.8	6.72	9.35	0.20	0.54		
39	4/17/08	10,075	6.4	7	<5	2.6	23	23	1.0	<5	660	205	0.34	87.2	9.17	9.83	0.24	0.77		
42	5/7/08	8,591	7.0	<5	<5	1.8	350	1600	46.0	<5	748	235	0.26	81	7.88	11.4	0.55	0.56		
49	6/25/08	8,307	6.7	8	<5	1.4	11	22	11.5	<5	776	296	0.32	132	15.91	8.24	0.42	1.10		
53	7/24/08	12,980	6.8	6	<5	1.4	<2	<2	1.0	<5	652	167	0.44	81.9	9.46	7.75	<0.05	1.02		
55	8/7/08	10,343	6.8	<5	<5	2.3	<2	<2	<1	<5	604	193		76		7.20		0.62		
56	8/14/08	8,381	6.8	<5		0.7	<2	<2	<1	<5	580	163		127		5.25		0.37		
58	8/22/08	12,036	6.9	<5	8	2.2	140	1600	<1	<5	620	149	0.27	110	5.03	9.8	<0.05	0.50		
59	8/29/08	12,407														7.41		0.77		
60	9/11/08	10,142														7.15		0.60		
62	9/19/08	13,332	6.9	<5	5	4.5	<2	<2	1.0	<5	760	224	0.33	84.8	7.52	11.3	0.11	0.84		
63	9/26/08	9,326														4.83		0.38		

Week of Operation	Sampling Location	Drainfield Discharge (all chemicals on Chemical Spreadsheet)																	
		DD-1																	
		Date	Total Flow	pH	TSS	BOD	Turbidity	Fecal Coliforms	Total Coliforms	Enterococcus	Oil & Grease	TDS	Chloride	Boron	Sulfate	Total Nitrogen	Total Phosphorus	MBAS	Total Nitrogen
		Detection Limit	0.1	<5	<5	0.1	2	2	1	<5	5	1	0.1	1	1	0.01	0.05		
Method	Units	gpd	mg/l	mg/l	NTU	MPN/100ml	MPN/100ml	MPN/100ml	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	bs/day		
7/2/07	Standards (avg)	6.5	30	30	10			24											
7/9/07	Standards (max)	6.5	45	45	15	200		104	15	2,000	500		500	10					
7/13/07																			
7/16/07																			
63	10/2/08	9,740													3.75		0.30		
64	10/9/08	10,591													4.28		0.38		
67	10/24/08	10,710													3.00		0.27		
67	10/30/08	10,710	6.8	<5	<5	1.0	<2	30	<1	<5	776	297		151	1.64	8.9	<0.05	0.15	
69	11/7/08	11,528													3.47		0.33		
70	11/20/08	10,753	6.9	<5	<5	3.7	<2	<2	<1	<5	772	296	0.34	80.8	3.84	9.76	<0.05	0.34	
71	11/26/08	12,100													3.90		0.39		
74	12/18/08	8,906	6.8	<5	<5	0.2	<2	<2	1.0	<5	736	308	0.44	80.8	3.54	8.49	<0.05	0.26	
80	1/28/09	8,715	6.6	6	<5	0.2	<2	23	<1	7	752	330	0.43	96.5	2.68	9.78	0.05	0.19	
82	2/9/09	6,038													2.51		0.13		
83	2/19/09	6,179	6.9	<5	<5	0.9	<2	<2	<1	<5	884	360	0.47	93.1	3.70	8.2	0.09	0.19	
84	2/26/09	6,664	6.9	5	<5	2.0	<2	<2	<1	<5					2.32		0.13		
85	3/5/09	7,541	6.8	<5	<5	0.7	<2	<2	<1	<5					1.98		0.12		
86	3/12/09	6,673	7.3	<5	<5	0.4	9	14	1	<5					1.95		0.11		
87	3/19/09	6,886	7.0	<5	<5	<0.1	<2	<2	<1	<5	896	290	0.43	115	2.33	7.99	0.08	0.13	
88	3/26/09	6,936	7.0	<5	<5	0.7	<2	<2	<1	<5					2.19		0.13		
90	4/9/09	5,005	6.9	6	<5	0.3	<2	<2	<1	<5					0.81		0.03		
91	4/16/09	5,439	6.8	39	50	35.4	1600	1600	<1	<5					22.45		1.02		
93	4/28/09	5,651	6.7	<5	<5	4.3	1600	1600	3	<5					9.81		0.46		
93	4/30/09	6,156	6.2	<5	<5	5.1	23	50	<1	<5	1012	365	0.52	146	7.42	10.6	<0.05	0.38	
94	5/7/09	8,300	7.0	<5	<5	2.6	<2	8	4	<5					4.07		0.28		
95	5/14/09	5,330	7.9	12	<5	1.1	<2	<2	<1	<5					3.39		0.15		
96	5/21/09	3,380	7.3	8	<5	3.0	<2	240	2	<5	1030	1240	0.58	384	3.26	19.8	0.06	0.09	
97	5/28/09	6,830	7.0	<5	<5	0.4	<2	<2	<1	<5					2.16		0.12		
98	6/4/09	7,617	7.0	<5	<5	0.9	<2	<2	<1	11					2.29		0.15		
99	6/11/09	7,371	6.9	<5	<5	0.8	<2	<2	<1	<5					2.00		0.12		
100	6/18/09	10,102	6.9	<5	<5	0.9	<2	<2	<1	<5	916	325	0.53	101	1.60	9.69	<0.05	0.13	
101	6/25/09	7,804	6.7	<5	<5	0.5	<2	<2	<1	<5					1.92		0.12		
102	7/2/09	6,048	7.2	<5	<5	0.4	<2	<2	<1	<5					1.55		0.08		
103	7/9/09	7,614	7.9	<5	<5	0.2	<2	<2	1	<5					1.60		0.10		
104	7/5/09	5,847	7.0	<5	<5	0.6	<2	<2	<1	<5					0.95		0.05		
105	7/22/09	5,886	6.6	<5	<5	0.3	<2	<2	<1	<5	744	275	0.54	126	1.23	8.05	0.08	0.06	
107	8/6/09	6,642	7.0	6	<5	0.2	<2	<2	<1	<5					1.21		0.07		
109	8/20/09	10,292	6.8	<5	<5	0.2	<2	<2	<1	<5	778	230	0.55	85.9	0.67	7.6	<0.05	0.06	

**TABLE 2-6B: MALIBU VILLAGE PLAZA WASTEWATER TREATMENT SYSTEM – SUMMARY**

Malibu Creek Plaza Effluent Water Quality Data							Nitrex™ Treatment System						
	Constituent	BOD	Total Suspended Solids	Turbidity	Oil & Grease	TDS	Sulfate	Chloride	Total Nitrogen	Enterococcus (0)	Total Coliform	Flow @ Sampling Date	Average Monthly Flow
	Units	mg/l	mg/l	NTU	mg/l	mg/l	mg/l	mg/l	mg/l	MPN/100 ml	MPN/100 ml	gpd	gpd
Malibu Creek Plaza Effluent Standards	Average	30.00	36.00	10.00	5.00	2,000	250	500	10.00	400	12,000		
Malibu Creek Plaza Effluent Standards	Max	45.00	45.00	13.00	15.00	2,000	250	500	10.00	104,000	12,000		
Title 22 Unrestricted Reuse Requirements	Average			2.00							2		
Title 22 Unrestricted Reuse Requirements	Max			10.00							23		
Sampling Locations	Date												
July 2007 Avg.		164.00	36.00	18.60	9.00	620	6	189	11.47			14,429	21,982
Aug. 2007 Avg.		70.75	23.00	25.55	<5	940	23	228	4.24			12,755	15,244
Sept. 2007 Avg. <sup>1</sup>		4.90	3.20	1.76	<5	590	66	241	5.79	<1	<2	10,938	11,778
Oct. 2007 Avg. <sup>2</sup>		6.90	<5	1.08	<5	572	90	90	4.71	<1	<2	13,011	11,950
Nov. 2007 Avg.		<5	<5	0.85	<5	526	59	212	3.23			12,475	11,692
Dec. 2007 Avg.		12.00	9.00	1.80	<5	688	62	270	3.57	<1	8	10,834	11,692
Jan. 2008 Avg.		6.00	<5	1.10	<5	604	50	162	4.73	<1	50	9,982	9,680
Feb. 2008 Avg.		<5	<5	5.40	<5	684	68	226	5.61	<1	<2	10,133	9,893
Mar. 2008 Avg.		<5	<5	1.90	<5	720	98	213	6.72	<1	<2	8,729	9,808
Apr. 2008 Avg.		<5	7.00	2.60	<5	660	87	205	9.17	<1	23	9,605	10,238
May 2008 Avg.		<5	<5	1.80	<5	748	81	235	7.88	<1	1,600	8,355	9,475
June 2008 Avg.		<5	8.00	1.40	<5	776	132	296	7.88	11.00	22	10,474	9,996
July 2008 Avg.		<5	6.00	1.40	<5	652	82	167	9.46	<1	<2	11,200	11,057
August 2008 Avg.		5.25	<5	1.73	<5	595	104	168	6.22	<1	533	8,696	10,255
September 2008 Avg.		5.00	<5	4.50	<5	760	85	224	6.50	1.00	<2	9,575	9,086
October 2008 Avg.		<5	<5	1.00	<5	776	151	297	3.17	<1	30	10,600	9,193
November 2008 Avg.		<5	<5	3.70	<5	772	81	296	3.74	<1	<2	10,093	9,734
December 2008 Avg.		<5	<5	0.20	<5	736	81	308	3.54	1.00	<2	7,551	9,153
January 2009 Avg.		<5	6.00	0.20	7.00	752	97	330	2.68	<1	23	7,817	8,094
February 2009 Avg.		<5	<5	1.45	<5	884	93	360	2.84	<1	<2	6,647	6,216
March 2009 Avg.		<5	<5	0.46	<5	896	115	290	2.11	<1	4	6,627	6,429
April 2009 Avg.		14.38	12.50	11.28	<5	1,012	146	365	10.12	1.15	813	4,673	5,649
May 2009 Avg.		<5	6.25	1.78	<5	1,030	384	1,240	3.22	1.75	63	4,461	5,258
June 2009 Avg.		<5	<5	0.78	4.63	916	101	325	1.95	<1	<2	7,457	7,139
July 2009 Avg.		<5	<5	0.38	<5	744	126	275	1.33	0.63	<2	6,363	6,372
August 2009 Avg.		<5	4.25	0.20	<5	778	86	230	0.94	<1	<2	8,046	6,986
Average from 9/1/07		6.13	4.65	3.02	2.71	764	104	295	4.07	1.06	132	9,396	9,905
Average from 10/1/08-09		3.58	4.23	1.95	3.10	845	133	392	3.24	0.73	853	4,511	7,535
Average from 10/1/08 excluding Operator errordata		2.50	3.64	0.95	3.10	828	134	395	2.99	0.67	105	4,751	7,586

<sup>1</sup>The Sept TN Average does not include the September 7 sampling data, as the TN for this date was high due to start-up conditions.

<sup>2</sup>The Oct TN Average does not include the October 25 sampling data, as the TN for this date was high due to Operational Issues.

(a) The limits for coliform shall apply, prior to discharge of the effluent into the leach fields.

(b) The enterococcus limit is geometric mean of at least 5 equally spaced samples in any 30-day period.

DD-1 = Drainfield Discharge

DF-1 = Disinfection Feed

**TABLE 2-7: MALIBU VILLAGE PLAZA WASTEWATER TREATMENT SYSTEM EFFLUENT – VOLATILE & SEMI-VOLATILE ORGANIC COMPOUNDS**

Date	Location	pH	TSS	BOD	Total Organic N	Nitrate-N	Ammonia-N	Total Coliform	Enterococcus	Turbidity	MEAS	Oil/Grease	Phosphorus	Total Dissolved Solids	Chloride	Sulfate	Boron	Dichloromethane	Chloroform	Vinyl chloride		
Unit		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	MPN/100mL	MPN/100mL	NTU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L			
Detection limits		0.5	10	10	0.05	0.05	0.02	0.01	0.01	0.05	5	0.01	0.5	100	100	0.01	0.5	0.01	0.01			
7/26/2007	DF-1				11.4	11.4					0.18	9	620	189	6.1	0.34	ND	ND	ND			
8/16/2007	DD-1	6.5	10	70	3.39	2.68	0.04	ND	0.67	900	1600	51	11.8	0.34	ND	7	940	228	23.4	0.32		
9/18/2007	DD-1	6.4	ND	6	5.29	1.96	2.8	ND	0.53	ND	ND	1	ND	ND	596	241	66.4	0.3	ND	ND		
10/25/2007	DD-1	6	ND	6	7.8	1.5	5.56	ND	0.34	2	2	ND	1.2	ND	ND	7.91	432	165	89.9	ND	ND	
11/15/2007	DD-1	7.6	ND	ND	3.87	0.81	2.27	ND	0.79	60	500	1	0.7	0.08	ND	6.25	540	212	59	0.31	ND	ND
12/6/2007	DD-1	6.2	9	12	3.57	1.67	1.43	ND	0.47	2	8	ND	1.8	0.08	ND	8.54	688	270	62.1	0.24	ND	ND
1/17/2008	DD-1	6.4	ND	6	4.73	1.37	3.3	ND	0.06	ND	50	ND	1.1	0.13	ND	10.1	604	162	49.8	0.21	ND	ND
2/29/2008	DD-1	6.2	ND	ND	5.61	1.56	3.53	ND	0.52	ND	ND	5.4	0.13	ND	22.9	684	226	68.4	0.23	ND	ND	
3/12/2008	DD-1	6.5	ND	ND	6.72	1.27	5.2	0.06	0.19	ND	ND	1.9	0.2	ND	9.35	720	213	97.8	0.27	ND	ND	
4/17/2008	DD-1	6.4	7	ND	9.17	2.53	4.31	0.05	2.28	23	23	1	2.6	0.24	ND	9.83	660	205	87.2	0.34	ND	ND
5/7/2008	DD-1	7	ND	ND	7.88	ND	5.91	0.24	1.73	350	1600	46	1.8	0.55	ND	11.4	748	235	81	0.26	ND	ND
6/25/2008	DD-1	6.7	8	ND	15.91	4	4.47	ND	7.44	11	22	11.5	1.4	0.42	ND	8.24	776	296	132	0.32	ND	ND
7/24/2008	DD-1	6.8	6	ND	9.46	2.65	6.2	0.02	0.59	ND	ND	1	1.4	ND	ND	7.75	652	167	81.9	0.44	ND	ND
8/22/2008	DD-1	6.9	ND	2.2	5.03	1.13	3.24	0.04		140	1600	ND	2.2	ND	ND	9.8	620	149	110	0.27	ND	ND
9/19/2008	DD-1	6.9	ND	4.5	7.52	1.35	5.53	ND	0.64	ND	ND	1	4.5	ND	ND	11.3	760	224	84.8	0.33	ND	ND
10/30/2008	DD-1	6.8	ND	1	1.64	0.94	0.25	ND	0.45	ND	ND	1	<0.05	ND	8.9	776	297	151	0.45	ND	ND	
11/20/2008	DD-1	6.9	ND	3.7	3.84	1.25	2.36	ND	0.23	ND	ND	3.7	<0.05	ND	9.76	772	296	80.8	0.23	ND	ND	
12/1/2008	DD-1	6.8	ND	0.2	3.54	1.60	1.85	ND	0.09	ND	ND	1	0.2	<0.05	ND	8.49	736	306	80.8	0.44	ND	ND
1/28/2009	DD-1	6.6	ND	0.2	2.68	1.05	1.37	ND	0.22	ND	23	ND	0.2	0.06	7	9.78	752	330	96.5	0.43	ND	ND
2/19/2009	DD-1	6.9	ND	0.9	3.70	0.94	2.5	ND	0.26	ND	ND	0.9	0.09	ND	8.2	884	360	93.1	0.47	ND	ND	
3/19/2009	DD-1	7	ND	ND	2.33	1.20	1.04	ND	0.09	ND	ND	<0.1	0.08	ND	7.99	896	290	115	0.43	ND	ND	
4/30/2009	DD-1	6.2	ND	ND	7.42	3.04	3.33	ND	1.05	23	50	ND	5.1	<0.05	ND	10.6	1,012	365	146	0.52	ND	ND
5/21/2009	DD-1	7.3	ND	ND	3.26	1.88	0.83	ND	0.55	<2	240	ND	3	0.06	ND	19.8	1,030	1240	384	0.58	ND	ND
6/18/2009	DD-1	6.9	ND	ND	1.60	1.21	0.39	ND	<0.01	<2	<2	ND	0.9	<0.05	ND	9.69	916	325	101	0.53	ND	ND
7/22/2009	DD-1	6.6	ND	ND	1.23	0.58	0.41	ND	0.24	<2	<2	ND	0.3	0.08	ND	8.05	744	275	126	0.54	ND	ND
8/20/2009	DD-1	6.8	ND	ND	0.67	0.38	0.27	ND	0.02	<2	ND	0.2	<0.05	ND	7.6	778	230	86	0.55	ND	ND	
Avg.		6.7	ND	2.5	25.54	2.07	2.9	0.02	0.04	123	12	0.07	0.07	0.018	ND	10.5	742	295	104	0.44	ND	ND

Date	Location	Bromoform	Chloroform	Trichloroethylene	Dichloroethene	Carbon disulfide	Methyl chloride	Chloroacetylene	VINYL Acetate	Dichloroethane	Butane	Chloroform	1,1,1-Trichloroethane	Carbon tetrachloride	Benzene	1,1-Dichloroethane	Dichloroethene	Dibromoform	Dichloroform	Vinyl chloride
Unit		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Detection limits		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
7/26/2007	DF-1	ND	ND	ND	ND	49.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
8/16/2007	DD-1	ND	ND	ND	ND	62.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9/18/2007	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
10/25/2007	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
11/15/2007	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
12/6/2007	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1/17/2008	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2/29/2008	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3/1/2008	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/17/2008	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5/7/2008	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6/25/2008	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
7/24/2008	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
8/22/2008	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9/19/2008	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
10/30/2008	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
11/20/2008	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
12/1/2008	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1/28/2009	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3/19/2009	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/5/2009	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5/21/2009	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6/18/2009	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
7/22/2009	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
8/20/2009	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Avg.																				

Sample Date	Location	Dibromoethane	Dibromoethylene	Acrolein	Acrylonitrile	1,2-Dichloropropane	Methyl tert-butyl ether	N-Nitroso diethylamine	N-Muconic diamine	N-Nitroso diisopropylamine	Phenoxyethane	Bis(2-chloroethyl)ether	2-Chlorophenol	1,2-Dichlorobenzene	1,3-Dichlorobenzene	Benzyl Alcohol	Bis(2-chloroisopropyl)ether	2-Methylbenzothiophene	Hexachlorobutadiene	4-Methylbenzonitrile	Nitrobenzene
Date	Unit	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		0.5	0.5	0.5	10	20	0.5	2	2	2	2	2	5	5	5	5	10	2	2	2	2
7/26/2007	DF-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
8/16/2007	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9/18/2007	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
10/25/2007	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
11/15/2007	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
12/6/2007	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1/17/2008	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2/29/2008	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3/12/2008	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/17/2008	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5/7/2008	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6/25/2008	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
7/24/2008	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
8/22/2008	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9/19/2008	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
10/30/2008	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
11/20/2008	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
12/18/2008	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1/28/2009	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2/19/2009	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3/19/2009	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/30/2009	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5/21/2009	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6/18/2009	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
7/22/2009	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
8/20/2009	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Avg	0.5	0.5	0.5	10	20	0.5	2	2	2	2	2	5	5	5	5	10	2	2	2	2



Date	Location	Benzene (d) anthracene	Dichloro ethane	Dimethyl ether	Bis(2- methylene) trichloro- ethane	Diphenyl ether	Benzene (D) dibrom- ethene	Benzene (K) dibrom- ethene	Benzene (a) dibrom- ethene	Indeno (1,2- c,d) pyrene	Dibenzo (a,h) anthracene	Benzene (G,h) pyrene
Units		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Collection Date												
7/26/2007	DF-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
8/16/2007	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9/18/2007	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
10/25/2007	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
11/15/2007	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
12/6/2007	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1/17/2008	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2/29/2008	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3/12/2008	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/17/2008	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5/7/2008	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6/25/2008	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
7/24/2008	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
8/22/2008	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9/19/2008	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
10/30/2008	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
11/20/2008	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
12/18/2008	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1/28/2009	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2/19/2009	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3/19/2009	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/30/2009	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5/21/2009	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6/18/2009	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
7/22/2009	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
8/20/2009	DD-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Avg												